nal would obtain, would enable it to be furnished, notwithstanding the great size which it would have, at a price probably not exceeding three or four times the cost of an average journal at the present time, and it would place in the hands of every chemist the complete original paper on every subject. Under the present system we but too often have but three or four different bald summaries in each of as many journals, perhaps all differing from each other, and possibly all incorrect. Whereas, were it possible to have a combined journal such as above described, a mere reference to its index would direct the chemist to all the original sources of information in every branch. It is to be feared, however, that such a plan, however desirable, is yet considerably in advance of the times. That something of the sort may eventually be accomplished, we may be at least permitted to hope—certainly the need for some new system is becoming more and more necessary, and as the number of workers in the field of chemistry is daily increasing, this necessity becomes more and more pressing.

The second part of Mr. Storer's book exhibits the same well-applied and intelligent industry which characterized the first. No pains seem to have been spared, no labour thought too great, to collect every fragment of knowledge bearing upon his subject. Thus we find the information on the subject of Essence of Turpentine derived from fifteen sources; that on Fibrin from nineteen; that on the Iodides of Mercury from forty-one; that on Iodine from fifty-three, and on the Nitrate of Potash from no less than sixty-three references, for the most important of which, the page, volume, and journal, are given in which the statements can be found. As a specimen of pains-taking and conscientious execution of a design, it would be difficult to surpass this. In some cases we observe that the results of the author's own investigations are given: this is so with chromate of ammonia, chromate of chromium, and chromate of lead, in the first part.

The second part treats of about 8000 subjects, so that it will be fair to conclude that the complete work will contain in all, about 24,000 substances, a sum which will give some idea of the gigantic labours which have been performed by chemists, within no very long period. It begins with "Convolvulinolic Acid," and extends to "Oxide of Tin," commencing with page 223, and terminating with p. 456. The typography and paper are good. We notice a few unimportant typographical errors,[1] but in a work of this kind, especially in a first edition, it can scarcely be expected that they should be wholly avoided.

We hope before many months to see this book complete, and the science of this country and of the world will be under obligations to Mr. Storer for the work which he has done. Nor will his labours cease, we hope, with this production. There are other specialties which might be taken up with great advantage, especially if treated with the same industry and distinguished ability.

M. C. L.

ART. XXIII.—*A Report on Hospital Gangrene, Erysipelas, and Pyæmia, as observed in the Departments of the Ohio and the Cumberland, with cases appended.* By M. GOLDSMITH, Surgeon U. S. V. Published by permission of the Surgeon-General U. S. A. 8vo. pp. 94. Louisville: Bradley & Gilbert, 1863.

IN the *Domestic Summary* of the last two numbers of this Journal several articles on the use of bromine in hospital gangrene and erysipelas were given; it will not be requisite, therefore, on the occasion of this present publication, to again describe the mode in which this agent has been used, or to present the results thereby obtained in the treatment of these diseases in the Departments of the Ohio and the Cumberland.

In the *Report* before us, besides giving the results of treatment, and the mode of using the bromine, Dr. Goldsmith sets forth his views of the etiology and pathology of the diseases in the treatment of which it has proved so efficacious, and states the manner in which he conceives the bromine to act.

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[1] P. 216, col. 2, line 7, for "zinc" read "silver." P. 216, col. 1, line 22, from b., for "carbonate" read "chromate." Pp. 299, 300, for "hydrate of lanthanum, cerium, lithium," read "hydrate of lanthana, ceria, lithia."

From the evidence thus afforded, it is to be concluded that bromine, applied in a certain manner, locally, to wounds attacked with hospital gangrene or erysipelas, was productive of most satisfactory results, in the cases in which it was thus applied, which occurred in certain hospitals in the Departments of the Ohio and the Cumberland, in the course of the years 1862–3.

Whether everywhere, and at all times, bromine will prove a "remedy *certain* in its effects for the arrest of hospital gangrene," and "as surely arrest this disease as quinia will ague," as some of the surgeons say in the present report, remains to be determined by further experience. Dr. Graves, in his clinical lectures, speaks of the absolute certainty he felt, after a limited experience in the management of scarlatina, that all cases could be successfully treated by a plan he had adopted. A trial in other epidemics showed him his mistake. Dr. Goldsmith finds many points of resemblance between scarlatina and the diseases in which he has used bromine. More extensive experience may bring to light some others. In all diseases of this kind, remedies highly thought of for a time, have afterwards disappointed expectation. In erysipelas, we have had announced as specifics, when applied locally, cantharides, iodine, sulphate of iron, &c.; in pyæmia, the tincture of aconite has been claimed as preventative; in scarlatina the efficacy of inunction with lard has had firm believers, &c. &c.

We ourselves have had to treat hospital gangrene, and were entirely satisfied with the results obtained by the following local treatment: The putrid tissues were thoroughly removed; infiltration of the unhealthy secretions among the muscles and under the skin was prevented by the proper application of bandages; and a saturated solution of white sugar was poured upon the sore. We were satisfied with the effect produced by this treatment; we are certain that we should not have any reason to be so at another time, or in other places. Circumstances vary cases of disease as of everything else; they make them curable by simple syrup, or by the application of a simple ointment, or so violent as to defy the actual cautery, and nitric acid, and also, it is most likely, bromine itself.

In the opinion of Dr. Goldsmith, which we give in his own words, "hospital gangrene, pyæmia, and erysipelas are, in some way, connected with miasms, or with poisonous substances, by some process developed in animal matter in the course of a series of chemical actions expressed in the generic term putrefaction." These miasms, or poisonous substances, act locally; and the disease in no case can be said to have a constitutional origin; the constitutional condition is a sequent state, and is caused by the absorption of the fluids produced by the local processes. The bromine acts from the power it possesses of arresting putrefaction, and of destroying the products of putrefaction in whatever form those products may present themselves, solid, fluid, or gaseous.

All must agree that the diseases in question are connected with miasms, or poisonous substances; the doubtful point is whether the poison can and does only act locally; that is, only through some solution of continuity. The great weight of authority is to the effect that, equally well with the poison of typhus —an animal poison developed by the same producing circumstances, and which unquestionably does infect through the surfaces of internal organs—the poison of hospital gangrene, the most important of the diseases under consideration, can enter the system through visceral surfaces. Endeavouring to aid our own powers of observation by the experience of others, we have concluded, from what we have witnessed ourselves of hospital gangrene, that infection is produced both from the surface of wounds, and also from the surface of internal organs. We have seen, as others have seen, cases where the change in the appearance of the wound was followed by constitutional phenomena, and, at other times, and these were when the hospital we visited was greatly overcrowded, cases where general disturbance preceded any local alteration in the character of the wound. We cannot, consequently, believe that any local application will cure all cases of hospital gangrene, and though there is sufficient evidence to show that bromine is one of the most effectual local remedies, and that the profession should be thankful for the discovery of its usefulness, yet that more than this cannot be conceded in regard to it. W. F. A.